

PATENT COOPERATION TREATY

Rec'd PCT/PTO 28 JUN 2004

From the
INTERNATIONAL PRELIMINARY EXAMINING AUTHORITY

PCT

To:

KILANDER, Annika
Amersham Biosciences AB
Björkgatan 30
S-751 84 Uppsala
SUEDE

NOTIFICATION OF TRANSMITTAL OF
THE INTERNATIONAL PRELIMINARY
EXAMINATION REPORT

(PCT Rule 71.1)

Date of mailing
(day/month/year)

15.01.2004

Applicant's or agent's file reference
PL0197-PCT

IMPORTANT NOTIFICATION

International application No.
PCT/EP 02/14315 ✓

International filing date (day/month/year)
16.12.2002

Priority date (day/month/year)
28.12.2001

Applicant
JAMES, Peter

1. The applicant is hereby notified that this International Preliminary Examining Authority transmits herewith the international preliminary examination report and its annexes, if any, established on the international application.
2. A copy of the report and its annexes, if any, is being transmitted to the International Bureau for communication to all the elected Offices.
3. Where required by any of the elected Offices, the International Bureau will prepare an English translation of the report (but not of any annexes) and will transmit such translation to those Offices.

4. REMINDER

The applicant must enter the national phase before each elected Office by performing certain acts (filing translations and paying national fees) within 30 months from the priority date (or later in some Offices). (Article 39(1)) (see also the reminder sent by the International Bureau with Form PCT/IB/301).

Where a translation of the international application must be furnished to an elected Office, that translation must contain a translation of any annexes to the international preliminary examination report. It is the applicant's responsibility to prepare and furnish such translation directly to each elected Office concerned.

For further details on the applicable time limits and requirements of the elected Offices, see Volume II of the PCT Applicant's Guide.

The applicant's attention is drawn to Article 33(5), which provides that the criteria of novelty, inventive step and industrial applicability described in Article 33(2) to (4) merely serve the purposes of international preliminary examination and that "any Contracting State may apply additional or different criteria for the purposes of deciding whether, in that State, the claimed inventions is patentable or not" (see also Article 27(5)). Such additional criteria may relate, for example, to exemptions from patentability, requirements for enabling disclosure, clarity and support for the claims.

Name and mailing address of the international
preliminary examining authority:



European Patent Office
D-80298 Munich
Tel. +49 89 2399 - 0 Tx: 523656 epmu d
Fax: +49 89 2399 - 4465

Authorized Officer

Danti, B

Tel. +49 89 2399-8161



PATENT COOPERATION TREATY

19 JAN 2004

Rec'd PCT/PTO 28 JUN 2004

PCT

WIPO PCT

INTERNATIONAL PRELIMINARY EXAMINATION REPORT (PCT Article 36 and Rule 70)



Applicant's or agent's file reference PL0197-PCT		FOR FURTHER ACTION See Notification of Transmittal of International Preliminary Examination Report (Form PCT/PEA/416)
International application No. PCT/EP 02/14315	International filing date (day/month/year) 16.12.2002	Priority date (day/month/year) 28.12.2001
International Patent Classification (IPC) or both national classification and IPC G01N33		
Applicant JAMES, Peter		

- This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.
- This REPORT consists of a total of 5 sheets, including this cover sheet.

☐ This report is also accompanied by ANNEXES, i.e. sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

 These annexes consist of a total of sheets.

- This report contains indications relating to the following items:
 - I ☒ Basis of the opinion
 - II ☐ Priority
 - III ☐ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
 - IV ☐ Lack of unity of invention
 - V ☒ Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
 - VI ☐ Certain documents cited
 - VII ☐ Certain defects in the international application
 - VIII ☐ Certain observations on the international application

Date of submission of the demand 13.06.2003	Date of completion of this report 15.01.2004
Name and mailing address of the international preliminary examining authority:  European Patent Office D-80298 Munich Tel. +49 89 2399 - 0 Tx: 523656 epmu d Fax: +49 89 2399 - 4465	Authorized Officer Stricker, J-E Telephone No. +49 89 2399-8395 

**INTERNATIONAL PRELIMINARY
EXAMINATION REPORT**

International application No. **PCT/EP 02/14315**

I. Basis of the report

1. With regard to the **elements** of the international application (*Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17)*):

Description, Pages

1-18 as originally filed

Claims, Numbers

1-27 as originally filed

Drawings, Sheets

1/6-6/6 as originally filed

2. With regard to the **language**, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language: , which is:

- ☐ the language of a translation furnished for the purposes of the international search (under Rule 23.1(b)).
 - ☐ the language of publication of the international application (under Rule 48.3(b)).
 - ☐ the language of a translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).
3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:
- ☐ contained in the international application in written form.
 - ☐ filed together with the international application in computer readable form.
 - ☐ furnished subsequently to this Authority in written form.
 - ☐ furnished subsequently to this Authority in computer readable form.
 - ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
 - ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.
4. The amendments have resulted in the cancellation of:
- ☐ the description, pages:
 - ☐ the claims, Nos.:
 - ☐ the drawings, sheets:

**INTERNATIONAL PRELIMINARY
EXAMINATION REPORT**

International application No. **PCT/EP 02/14315**

5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed (Rule 70.2(c)).

(Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.)

6. Additional observations, if necessary:

V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Yes: Claims	1-26
	No: Claims	27
Inventive step (IS)	Yes: Claims	1-26
	No: Claims	27
Industrial applicability (IA)	Yes: Claims	1-27
	No: Claims	none

2. Citations and explanations

see separate sheet

Section V

Reference is made to the following documents:

D1: WO 00 02893 A (THOMPSON ANDREW HUGIN ;BRAX GROUP LTD (GB); SCHMIDT GUENTER (GB);) 20 January 2000 (2000-01-20)

D2: BLACKSTOCK W P ET AL: 'Proteomics: quantitative and physical mapping of cellular proteins' TRENDS IN BIOTECHNOLOGY, ELSEVIER, AMSTERDAM, NL, vol. 17, no. 3, March 1999 (1999-03), pages 121-127, XP004157732 ISSN: 0167-7799

1. The present application does not meet the requirements of Article 33(2) PCT, because the subject-matter of claim 27 is not new as the nature of the constituting relevant components of the said kit is not specified. The subject-matter is only generically defined by means of non-limiting functional terms, here a linker, which could be a linker disclosed in D1 or any linker of the prior art. Irrespective of its intended use, any claimed kit has to meet per se the novelty and inventive step requirements of Art. 33(2) and (3) PCT.
2. D1 discloses (see claims 23-35) a method for characterising an analyte, comprising providing a compound in which the analyte is attached by a cleavable linker to a mass marker relatable to the analyte, cleaving the mass marker from the analyte and identifying the mass marker.

The method of claim 1 of the present application differs merely from that of D1 in that a biomolecule (i.e. the target) remains bound to the mass marker and in that the linker is photo-cleavable.

The subject-matter of claim 1 is therefore novel (Article 33(2) PCT).

The problem to be solved by the present invention may therefore be regarded as to provide a method for gaining more detailed information about molecule-molecule interaction, e.g. in cell-map proteomics.

The solution to this problem proposed in claim 1 of the present application is

**INTERNATIONAL PRELIMINARY
EXAMINATION REPORT - SEPARATE SHEET**

International application No. PCT/EP02/14315

considered as involving an inventive step (Article 33(3) PCT) as the skilled person would not have been motivated to use a linker having the said feature into a method having said steps (a) to (f), e.g. in cell-map proteomics as disclosed in D2. Claims 2-25 are dependent on claim 1 and as such also meet the requirements of the PCT with respect to novelty and inventive step.

3. As the use of the linker of claim 26 (see also Fig. 2) for labelling a specific target biomolecule for MS parent ion scanning is neither disclosed nor rendered obvious in the prior art, the said claim meets the requirements of Art. 33(2) and (3) PCT.